**Math Expressions Mini Unit A**

**Day 1: Lesson 1**

**Objective:** For students to understand metric measurements in comparison to real life objects.

**Materials:** Objects from around the classroom.

**Activities:**

1. Use Introductory Metric Measurement smart board lesson, to discussion metric units of measurement
2. Hold up objects from around the room and discuss what unit of metric measurement that they would use to determine its length.
3. Have students complete class activity A-1 with a partner.
4. Go over class activity A-1 as a whole class.
5. Allow students time to finish A-1 Homework. (Both Sides)

**Homework:** A-1 Worksheet, One the side of the worksheet write down something at home that you would use each form of metric measurement to find its length.

**Assessment:** Teacher observations

**Day 2: Lesson 2**

**Objective:** For students to understand the difference between perimeter and area.

**Materials:** Objects from around the classroom.

**Activities:**

1. Anticipatory Set: Have students construct a rectangle using pipe cleaners. Use a rule to determine the perimeter. Then find the rectangles area.
2. Find the perimeter and area of their math book.
3. Have students complete class activity A-2 with a partner.
4. Go over class activity A-2 as a whole class.
5. Complete “Going Further” as a whole class.
6. Allow students time to finish A-2Homework. (Both Sides)

**Homework:** A-2 Worksheet, Find the perimeter and area of a rectangular object at home.

**Assessment:** Teacher observations

**Day 3: Lesson 3**

**Objective:** For students to classify angles by size, and classify triangles by the size of their angles. Derive formulas for areas of parallelograms sand right triangles.

**Materials:** Geoboards and rubber bands

Use Teacher Manual pages 130-136 to guide lesson

**Activities:**

1. Use Introductory Triangles Smartboard Lesson.
2. Make sure students are answer these questions:
   1. Can a triangle have more than one acute angle? *Yes, a triangle can have as many as three acute angles.*
   2. Can a triangle have more than one right angle*? No*
   3. If you put two identical right triangles together that the longest sides touché, what figure is formed? *A rectangle or a quadrilateral*
3. Do “Alternate Approach “on page 133 with geobaords.
4. Go over class activity A-3 as a whole class.
5. Allow students time to finish A-3 Homework. (Both Sides)

**Homework:** A-3 Worksheet, One the side of the worksheet write down something at home that you would use each form of metric measurement to find its length.

**Assessment:** Teacher observations

**Day 4: Lesson 4**

**Objective:** For students to find the area of triangles.

**Materials:** Math Expressions Unit A booklet and Homework 4

Use Teacher Manual pages 138-142 to guide lesson

**Activities:**

1. Use cut squares/triangles out of construction paper to demonstrate 2 triangles make a square/rectangle.
2. Ask students to give you the formulas for the area of squares and rectangles. Ask them to brainstorm formulas for the area of a triangle.
3. Look at Page 81-86. Discuss and complete pages as a whole class.
4. Allow students to complete Homework page A-4 both sides.

**Homework:** A-4 Worksheet.

**Assessment:** Teacher observations

**Day 5: Lesson 5**

**Objective:** For students to select or infer the dimensions needed to find the area and perimeter of triangles and parallelogram.

**Materials:** Students workbook packets.

Use Teacher Manual pages 143-150 to guide lesson

**Activities:**

1. Open with questions:
   1. Do you need to have the height of each triangle to find the perimeter? Area?
   2. Do you need height to find the area of a parallelogram?
2. Correct yesterday’s homework. Go over any areas of concern.
3. Complete class activity pages 87, 88 89, and 90 as a whole class. Use teacher manual to guide discussion.
4. Allow students time to finish A-5 3 Homework. (Both Sides)

**Homework:** A-5 Worksheet, One the side of the worksheet write down something at home that you would use each form of metric measurement to find its length.

**Assessment:** Teacher observations

**Day 6: Lesson 6**

**Objective:** For students to calculate perimeter and area using customary units of measurement.

**Materials:** Use Teacher Manual pages 130-136 to guide lesson, Students Class Activity book, and Homework Worskheet. .

**Activities:**

1. Make sure students are answer these questions:
   1. What units do you usually use to measure the length of things at home?
   2. Ask students some common conversions. Feet to inches to yards to mile etc.
2. Complete “Convert Units” page 91 in class activity book.
3. Discuss how students would find the perimeter and area of their house. Ask the question: “Are you homes perfect rectangles/squares?”
4. Complete Class Activity page 92
5. Discuss estimating length using paces. See teacher’s manual page 155-156.
6. If time: Complete the Challenge Activity in small groups and share as a whole class. (See page 157)

**Homework:** A-6 Worksheet

**Assessment:** Teacher observations

**Day 7: Test**

**Objective:** Assess student understanding of perimeter and area.

**Materials:** Unit A test. .

**Activities:**

1. Ask for any questions and review student understanding of perimeter and area.
2. Allow students to take the Unit A Test.

**Homework:** A-6 Worksheet

**Assessment:** Teacher observations